The Signal Regiment Transformation: Elements Needed to Succeed

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The Signal Regiment Transformation: Elements Needed to Succeed

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Currently thirty-four of the now thirty seven active duty combat brigades in the U.S. Army are supporting the global war on terrorism thirteen are deployed, thirteen are training to deploy, and the other eight are reconstituting from recent deployments. 1 At the center of these brigades are the combat support functions, including the Signal Regiment. The Signal Regiment and the U.S. Army are concurrently conducting the largest force transformation in the Army's history. The current Chief of Signal, Brigadier General Randolph Strong believes, "the networks and information systems provided by the Signal Regiment are at the center and are key enablers to every ongoing transformation effort in the U.S. military." As the "first in, last out" warriors, the Signal Corps is changing more rapidly than the other traditional war fighting functions, but the regiment is not implementing the measures necessary for a successfully transformation. In order for the Signal Regiment to successfully transform in the current operating environment, the roles and responsibilities of the Signal Company Commander must be clearly defined within the newly formed Unit of Action, the use of commercial off the shelf (COTS) equipment and current systems upgrades must be maximized (until Warfighter Information

<sup>&</sup>lt;sup>1</sup> Global Security. Boots on the Ground U.S. Army. http://www.globalsecurity.org/military/ops/boots.htm.

<sup>&</sup>lt;sup>2</sup> Randolph Strong. "Now is exciting, critical time for Regiment." Army Communicator 30, no. 4 (2005): 1.

Network-Tactical (WIN-T) is available), and soldiers must be effectively trained on changes the transformation within the Signal Regiment.

## Background

According to FM 3-90.61, "We are seeking a campaign-quality Army with a joint and expeditionary mindset." In 1999, as part of Joint Vision 2010, the Army announced plans to modernize its force in order to meet the changes in today's environment. These changes include the organization of the traditional Army service component commands, armies, corps and divisions are organizing into Units of Employment (UEx for tactical and lower and UEy for theater support and land component). Traditional brigades are being organized into Units of Action (UA). Within the Signal Regiment, the mobile subscriber equipment (MSE) Signal Brigades providing support to the Corps will not exist and the Signal Battalions that once supported Divisions will now support their Unit of Action as an organic element, the Network Support Company. This structure allows the Unit Action

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<sup>&</sup>lt;sup>3</sup> U.S. Army. FM 3-90.61: viii.

Global Security. Unit of Employment. http://www.globalsecurity.org/military/agency/army/ue.htm.

<sup>5</sup> Global Security. Unit of Action. http://www.globalsecurity.org/military/agency/army/ua.htm.

commander and Brigade Signal Officer the flexibility to task organize their signal support to fit the mission.

## Commander's Role

The Network Support Company (NSC) is not only responsible for the brigade's ability to communicate via transmissions and wide area network connectivity, but also for much more.

[The commander] is now responsible for network operations (NETOPS) including network management and computer network defense (CND), range extension and relay support for single channel ground air radio systems (SINCGARS) and enhanced positioning locating radio systems (EPLRS), and communication electronic (CE) maintenance. 6

These responsibilities, which once belonged to the Corps Signal Brigade as a whole, are now the responsibility of the Network Support Company Commander and the soldiers in his or her charge. Therefore, even though the mission itself has not changed, the roles and responsibilities of the Signal Company Commander have. Captain Brian Jacobson states, "The makeup of the company changed to better support independence in a non-contiguous operating environment, but the mission remained the same; provide the brigade commander voice and data communications."

<sup>&</sup>lt;sup>6</sup> U.S. Army. FM 3-90.61: viii.

<sup>&</sup>lt;sup>7</sup> Brian Jacobson. "Employing the Signal Company in a Unit of Action." Army Communicator 30, no. 4 (2005): 12-14.

Traditionally, the Signal Company Commander would position himself or herself with the Node Center, the company's major communication's node. However Captain Brian Jacobson who is assigned to the Joint Readiness Training Center as a Signal Observer Controller insists, "Command for a signal officer doesn't take place in a little tent with a digital non-secure voice terminal and laptop anymore. Command is conducted from a Network Operations and Security Center (NOSC) co-located with the brigade signal officer in the Brigade Tactical Operations Center."8 Captain Jacobson believes the new role of the Network Support Company Commander is not only to be a commander of troops but also an assistant staff officer integrated in the planning and decision making process. 9 Because the NOSC is the communications heartbeat of the brigade, the commander is able to command control and meet the responsibilities outlined in FM 3-90.61, which in turn leads to better support for units receiving communication. No doubt there are challenges with such complex changes in the roles and responsibilities of the NSC Commander, but by clearly identifying the roles and responsibilities of the commander during this transformation the Signal Regiment will ensure its success.

<sup>&</sup>lt;sup>8</sup> Jacobson, Army Communicator, 12-14.

<sup>&</sup>lt;sup>9</sup> Jacobson, Army Communicator, 12-14.

# Commercial Off-the-Shelf Equipment

Once the roles and responsibilities of the NSC Commander are clearly identified, he or she can focus on the biggest challenge the Signal Regiment continually faces, keeping pace with advancing technology. One of the ways the regiment will be able to overcome technological challenges is through COTS equipment purchases whereby units use individual funds to purchase equipment that has already been certified for use within the Department of Defense networks. While it does not standardize equipment throughout the regiment, it does accomplish the mission for now. COTS accomplish the mission by providing increased capabilities compared to current legacy systems for less cost.

In addition to the use of COTS to increase capabilities and meet new warfighting requirements the Signal Regiment and the U.S. Army hope to fix the standardization problems with the fielding of Warfighter Information Network-Tactical. This program is under development by Team Matrix and is set to be fielded by 2008. According to Team Matrix's mission statement, "Providing secure, high speed, high capacity backbone for the objective force C2, WIN-T will enhance the mobile bandwidth and networking capability available from theater to battalion level

and below."<sup>10</sup> Unfortunately, in the interim, the Army has spent time and money fielding Joint Network Nodes (JNN), Base Band Nodes (BBN), and Command Post Nodes (CPN). Brigadier General Strong, the current Chief of Signal, believes risks are being taken by keeping current systems and stretching the life of the mobile subscriber equipment.<sup>11</sup> This is already been done, but these systems continue to work and will continue to work. However, these nodes have not eliminated COTS purchasing. The hope is that WIN-T will limit the use of COTS. During OIF III, 3<sup>rd</sup> Signal Brigade purchased \$300,000 worth of additional off-the-shelf equipment to expand the JNN to meet their needs.<sup>12</sup> No doubt the above nodes provide great capability to the warfighter, but these fieldings are not saving time or money; in fact, they wind up costing the Army more when it has to be supplemented with COTS.

Major Ike Wilson, a division planner, noted "From an implementer's perspective, the difficulty with transformation is this simple: we have been tasked too largely to complete a change effort in a very short time, while still engaged in

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Warfighter Information Network-Tactical (WIN-T).
http://www.defense-update.com/products/w/win-t.htm.

<sup>&</sup>lt;sup>11</sup> Strong, Army Communicator 1.

<sup>&</sup>lt;sup>12</sup> Byron Johnson. "JNN Reorganizing to Bridge Gaps in Communication." Army Communicator 30 no. 3 (2005): 2-4.

war."<sup>13</sup> By using systems upgrade and COTS equipment, however, the regiment can keep pace with technology, meet warfighter requirements, and win the war on terrorism all while successfully transforming saving time and money. When WIN-T is available, the regiment can focus on its successful fielding.

# Training the Force

At the heart of the transformation, fielding, and the War are the Soldiers that make the mission happen. Training the force is the only way to ensure a successful transformation. Soldiers need to be well-versed and trained on doctrinal changes as well as trained to operate new equipment prior to deploying for War. According to Major Ike Wilson,

We are "transforming" warfighting organizations with current ("Legacy") organizational and bureaucratic policies, processes . . . and people. TRADOC processes are hindering doctrine development - may be a blessing in disguise, as this allows the warfighting echelons to "go it alone." Validation of what we actually learn from gathered lessons is the crux of the future problem. 14

TRADOC, U.S. Army's Training and Doctrine Command, is charged with "ensuring synchronization of the doctrine, training, leader development, organizational structure, and material readiness, ensuring the Army is the best that it can be

<sup>&</sup>lt;sup>13</sup> Ike Wilson. "Army Transformation: A Report from the Field". http://www.campbell.army.mil.

<sup>&</sup>lt;sup>14</sup> Wilson, "Army Transformation: A Report from the Field".

and that U.S. Soldiers are trained and ready."<sup>15</sup> Major Wilson suggests TRADOC should be driving the transformation through doctrinal changes and training. Instead, the transformation is being conducted at the divisions or Unit of Actions.<sup>16</sup>

A good example of training not taking place to facilitate the transformation is with the fielding of the JNN mentioned in the previous paragraph. The Signal School at Fort Gordon, GA, tasked with training the Signal Regiment received the JNN only after it had already been fielded to deploying units. It was first fielded to the 3<sup>rd</sup> Infantry Division for almost immediate deployment, then to other divisions well before the Signal Center was ready to officially train Soldiers at Fort Gordon on the equipment. 17 In order to allow Soldiers the opportunity to operate their equipment before being asked to deploy with it, equipment should be fielded at the school houses before unit Because the Signal Regiment Soldiers are some of fieldings. the best in the world, the lack of training will not stop the transformation efforts; however, effective training on doctrinal changes and new equipment will make for a smoother and more successful transformation.

<sup>&</sup>lt;sup>15</sup> Global Security. *Training and Doctrine Command*. http://www.globalsecurity.org/military/agency/army/tradoc.htm.

<sup>&</sup>lt;sup>16</sup> Wilson, "Army Transformation: A Report from the Field".

<sup>&</sup>lt;sup>17</sup> General Dynamics C4 Systems. Army and General Dynamics Officials Open JNN Network Training Facility. http://www.gdc4s.com/featurettes/jnn.cfm.

#### Conclusion

Robert F. Kennedy once said, "Few will have the greatness to bend history itself; but each of us can work to change a small portion of events, and in the total of all those acts will be written the history of this generation." The Army's transformation will be written in the history of this generation and each Soldier has a responsibility in the transformation effort. The Signal Regiment will be a driving force in the transformation, and there are three elements that will guarantee success. The transformation will succeed by clearly defining the roles and responsibilities of the Signal Company Commander within the newly formed Unit of Action; by maximizing the use of commercial off the shelf (COTS) equipment and current systems upgrades until Warfighter Information Network-Tactical (WIN-T) is available; and effectively training Soldiers and setting them up for success. The Army's transformation to a more modular and expeditionary force is not an easy mission and the Signal Regiment's task to transform accordingly is just as daunting. Because the current operational environment is not conducive to a large scale transformation, the Signal Regiment must continue to take steps above to meet challenges brought about by the transformation effort and, in doing so, ensure a successful transformation.

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<sup>&</sup>lt;sup>18</sup> Robert Kennedy. Famous Quotes. <a href="http://www.qoutes.com">http://www.qoutes.com</a>.

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